Wisconsin
Department of Commerce

Evaluation # 200263-B (Replaces 200015-B)

Safety & Buildings Division
201 West Washington Avenue
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Wisconsin
Building Products Evaluation

Material	Telescopic Bleachers
Manufacturer	Hussey Seating Company 38 Dyer Street Extension North Berwick, Maine 03906

SCOPE OF EVALUATION

GENERAL: This report evaluates the interior folding bleacher Models 2600, 3000, 3300, MAXAM26 and MAXAM33 telescopic bleachers manufactured by Hussey Seating Company, Inc.

This review includes the cited **International Building Code (IBC)** requirements below in accordance with the current **Wisconsin Amended IBC Code:**

- **Egress Width (general):** The interior folding bleacher Models 2600, 3000, 3300, MAXAM26 and MAXAM33 telescopic bleachers have been evaluated for conformance in accordance with **ss. IBC 1003.2.3** and **1003.2.8**.
- **Egress Required Aggregate Width for A-4 Assembly**: The interior folding bleacher Models 2600, 3000, 3300, MAXAM26 and MAXAM33 telescopic bleachers were evaluated in accordance with **s. IBC 1008.5.**
- **Guardrails:** The interior folding bleacher Models 2600, 3000, 3300, MAXAM26 and MAXAM33 telescopic bleacher guardrails have been evaluated in accordance with **s. IBC 1003.2.12**, **Exception 7.**, and **s. IBC 1008.12**.
- **Bleacher Foot-boards:** The interior folding bleacher Models 2600, 3000, 3300, MAXAM26 and MAXAM33 telescopic bleacher foot-boards were evaluated in accordance with **s. IBC 1008.13**.
- **Bench Seating:** The interior folding bleacher Models 2600, 3000, 3300, MAXAM26 and MAXAM33 telescopic bleacher bench seating was evaluated in accordance with **s. IBC 1008.14**.

- **Bleacher Structure:** The interior folding bleacher Models 2600, 3000, 3300, MAXAM26 and MAXAM33 telescopic bleachers are designed and constructed in accordance with **s. IBC 1604.1, s. IBC 1604.2** and **s. IBC 1607.l**.

DESCRIPTION AND USE

The **interior folding bleachers of Model 2600, 3000, and 3300** are constructed using rectangular shaped main columns of 33 ksi minimum yield steel. Angle members are used for diagonal bracing.

Model 2600 is the general description of the gym seating having a row spacing of 22-, 23-, 24-, 25- and 26-inches with foot-level aisles. This model is available with 10-inch Classic Wood Seats and 10-inch or 12-inch Comfort Curve Seats (12-inch seats for 24-inch spacing and higher only). Also, aisles are available with both foot-level and seat-level varieties providing the rise (seat-to-seat) does not exceed 11-inches.

Model 3000 is the general description of the gym seating having a row spacing of 28-, 29-, 30-, 31-, 32- or 33-inches with foot-level aisles. This model is available with 10-inch Classic Wood or 10-inch and 12-inch Comfort Curve Seats.

Model 3300 is also the general description of the gym seating having a row spacing of 30-, 31-, 32- or 33-inches, available with 10-inch Classic Wood Seats and 10-inch or 12-inch Comfort Curve. Classic Wood Seats available are with foot level or seat-level aisles. The Comfort Curve seats are available with foot-level aisles only.

The interior folding bleachers of **Model MAXAM26 and MAXAM33** are constructed using rectangular tubular shaped columns of 46 ksi minimum yield steel. Flat strip members are used for sway bracing.

MAXAM33 is the general description of the gym seating having a row spacing of either 30- or 33- inches. This model is available with 10-inch Classic Wood Seats or 10-inch MVP (contoured plastic seats). Also, aisles are available with both foot-level and seat-level varieties providing the rise (seat-to-seat) does not exceed 11-inches, and for seat-level aisles, the seat surface is flat, i.e., wood seats only.

MAXAM26 is the general description of the gym seating having a row spacing of 22-, 24-, or 26- inches with foot level aisles. This model is available with 10-inch Classic Wood Seats or 10-inch MVP (contoured plastic seats). Also, aisles are available with both foot-level and seat-level varieties providing the rise (seat-to-seat) does not exceed 11-inches and the seat surface is flat, i.e., wood seats only.

Models 3000, 3300 and **MAXAM33** are also available with folding wood, or plastic backrests for Comfort Curve, MVP and Classic Wood models as applicable, or folding plastic Sentinel chairs.

Hussey also offers a structural foam modular seating unit, available in 10-inch only, that can be used when no aisles are required and are available on Models 2600, 3000, and 3300 only.

Wooden seat boards and front risers are Southern Yellow Pine. The rear riser is 16-gauge (Model 2600), or 14-gauge (Models 3000, 3300, MAXAM26 and MAXAM33), pre-galvanized formed steel. A formed 16-gauge nose (Models 2600, 3000, and 3300), or 14-gauge (MAXAM26 and MAXAM33), provides support for the front of the plywood decking and the seats.

The seat and riser supports are 12-gauge, painted formed steel for Models 2600, 3000, and 3300. The seat and riser supports are 11-gauge, painted formed steel for MAXAM26 and MAXAM33.

The **footrest** consist of 5-ply minimum, 19/32-inch underlayment, all plies are Group 1, exterior glue, plugged cross bands under-face, produced in conformance with PS-1-74 of the American Plywood Association. Face grain is parallel to seating for Models 2600, 3000, and 3300. Face grain is perpendicular to seating for Models MAXAM26 and MAXAM33.

Wall-attached sections have a maximum of 30 rows for 9 5/8-inch rise, and 25 rows for 11 5/8-inch rise.

The forward folding (movable), sections have a maximum of 12 rows or 11 feet in overall height.

Where the rise of a seat exceeds 11-inches, intermediate steps shall be provided the full width of the aisles. The steps shall have a rise of not more than 11-inches and a tread of not less than 10-inches nominal width. In no case shall the angle of seating exceed 45 degrees.

This approval covers (1) 20-foot section of bleachers for Models 2600, 3000, and 3300, or (1) 25'-6" section of bleachers for Models MAXAM26 and MAXAM33. Guardrails shall be at both ends of each section.

Guardrails are constructed to prevent the passage of a sphere larger than 4-inches in diameter. In accordance with **s. IBC 1008.12**, when bleachers have more than one pull-out section, the plan submittal shall show end guardrails per section (or sockets for installation of guardrails per section), or designed such that individual bleacher sections **cannot** be extended without extending the rest of the sections. Guardrail design and placement shall comply with the requirements of **s. IBC 1008.12**. Guarding between the foot boards and seat boards is also required.

All bleachers with contoured seats must be provided with aisles, in accordance with **s. IBC 1008.7.6**. **Exiting via the seat boards is not permitted with contoured seats.**

The occupant capacities of buildings and rooms within buildings are established by exit width, toilets and the class of construction of the building. The capacity of the bleachers **cannot exceed** the allowable capacity of the room or building.

The exit width indicated in **s. IBC 1008.7.1** through **s. IBC 1008.9** applies only to the aisles and exit paths within the perimeter of the bleachers. It does not apply to the exit width from the room in which the bleachers are located nor from the building. Exit width requirements from the room and building are determined by **s. IBC 1008.1** through **s. IBC 1008.6**.

This approval does not address barrier-free requirements. Accessible seating in accordance with the applicable requirements in **IBC Chapter 11** shall be reviewed during building plan review.

This approval is not for an individual project, but for the design concept only. Plans are required for each project indicating the approval number, member sizes, wall and floor anchoring information, guardrail details, size and location of bleacher aisles and construction details required to construct the bleachers from the plans.

CALCULATIONS

Structural calculations for Hussey Seating Co., Inc., telescopic bleachers were prepared (signed and sealed) and are on file with the department. Deck performance calculations are also on file with the department.

LIMITATIONS OF APPROVAL

Except as noted below, calculations and drawing details shall be submitted on a job-to-job-basis showing floor and or wall anchorage loads and how attached, respectively, in accordance with **s. Comm 61.30**.

In accordance with **s. Comm 61.30**, anchorage details shall be shown on the plans indicating how folding bleachers are attached to the wall and floor. If installation is in an older building, (more than 4 years old), bleacher plans shall show the construction of the wall and/or floor to which the bleacher section will be anchored. This material approval also waives floor anchorage calculations to solid concrete walls and light-weight concrete block only (see **DESCRIPTION AND USE** section). Both wall/floor anchorage details shall be shown on plans on a job-to-job basis. Wall anchorage details and calculations are required for wall anchorage to wood stud/drywall, etc., on a job-to-job basis.

The Hussey bleachers are approved for plan submittal without structural calculations showing that dead and live load support for open or partially opened and dead load in the closed position, can be safely carried by the supporting structure in accordance with **s. Comm 61.30**.

Forward-folding bleachers must be securely bolted to the floor to prevent overturning in the closed position. Movable bleachers shall have stops so that it is not possible to move the bleacher when it is being used. Tier catches, which impede this movement, shall be supplied on all sections and all rows.

Additional information required with plans submitted on a job-to-job basis:

1. Details of row locks, wheels and wheel channels with calculations showing that they stop front-to-back movement when seating is partially or fully opened;
2. Floor anchorage calculations and details for bleachers installed in a permanent telescoped position, in accordance with **s. Comm 61.30**.

This approval will be valid through December 31, 2007, unless manufacturing modifications are made to the product or a re-examination is deemed necessary by the department. The Wisconsin Building Product Evaluation number must be provided when plans that include this product are submitted for review.

DISCLAIMER

The department is in no way endorsing or advertising this product. This approval addresses only the specified applications for the product and does not waive any code requirement not specified in this document.

Revision Date:
Approval Date: March 11, 2003 By: _____

Lee E. Finley, Jr.
Product & Material Review
Integrated Services Bureau

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